CLAIMS

WHAT IS CLAIMED IS:

1. An imaging device, comprising:

a storage unit which pre-stores information representing a relation between one of dark current components and an output signal of an optical black pixel arranged in a predetermined optical black area on an imaging sensor, said dark current components being superimposed on pixel signals of effective pixels, respectively, arranged in a predetermined effective pixel area on the imaging sensor;

a dark current obtaining unit which obtains dark current components superimposed on pixel signals of said respective effective pixels based on both said information stored in said storage unit and output signal of said optical black pixel; and

a correcting unit which corrects said dark current components obtained by said dark current obtaining unit according to said pixel signals.

2. The imaging device according to claim 1, wherein the information stored in said storage unit is information representing a ratio of said one of dark current components to said output signal every one of lines of said effective pixel area.

3. The imaging device according to claim 1, wherein the information stored in said storage unit is information representing a difference between said one of dark current components and said output signal every one of lines of said effective pixel area.

4. The imaging device according to claim 1, wherein the information stored in said storage unit is information representing a position of said optical black pixel in said optical black area every one of the effective pixels in said effective pixel area, said optical black pixel outputting an output signal having a value equal to said one of dark current components.

5. The imaging device according to claim 1, wherein said optical black area is

composed of the optical black pixel for at least one line from which the output signal is read prior to the pixel signals of the top line of said effective pixel area.